WHAT IS CLAIMED IS:

1. An ultrasonic detector installable on a truck trailer fitted with a night light, comprising a console unit (10) and at least one ultrasonic detection unit (20); wherein

the at least one ultrasonic detection unit (20) emits ultrasonic waves, receives reflected wave signals within a predetermined time, and converts the wave signals to pulse signals; and

the console unit (10) collects pulse signals from the at least one ultrasonic detection unit (20), and then generates the distance data to be displayed through a digital display (13) and to determine whether to activate an alarm (12) to warn the driver of a reducing distance between the truck trailer and any object.

2. The ultrasonic detector according to claim 1, wherein the at least one ultrasonic detection unit has a controller chip (25), multiple transceivers (21-24), a second RF interface (26), a second cable interface (27), a storage battery (28) and a recharge circuit (29).

3. The ultrasonic detector according to claim 1, wherein the cable interface (15) of the console unit (10) and the cable interface (27) of the at least one ultrasonic detection unit (20) are to be interconnected by a cable for bidirectional communication.

4. The ultrasonic detector according to claim 1, wherein the RF interface (14) of the console unit (10) and the RF interface (26) of the at least one ultrasonic detection unit (20) are used for establishing radio frequency communication.

5. The ultrasonic detector according to claim 1, wherein the console unit

(10) has a microprocessor that is connected to an alarm (12), a digital display (13), a first RF interface (14) and a first cable interface (15).

6. The ultrasonic detector according to claim 2, wherein the controller chip (25) of the at least one ultrasonic detection unit (20) is connected to the brake light of the vehicle through a special connector (201) to obtain necessary control signals to initiate the operation cycle of the transceivers (21-24).

7. The ultrasonic detector according to claim 5, wherein the alarm (12) is a buzzer.

8. The ultrasonic detector according to claim 5, wherein the digital display (13) is a seven-segment LED display.

9. The ultrasonic detector according to claim 5, wherein the digital display (13) is an LCD display.

10. The ultrasonic detector according to claim 5, wherein the recharge circuit (29) of the ultrasonic detection unit (20) is coupled to the night light on the truck trailer through a special connector (201), through which the storage battery (28) gets recharged using electricity from the night light of the truck trailer.

11. The ultrasonic detector according to claim 1, wherein each ultrasonic detection unit (20) has the second cable interface (27), the storage battery (28) and the recharge circuit (29) respectively connected to a communication cable, a brake light and night light of the truck trailer through the special connector (201).

12. The ultrasonic detector according to claim 6, wherein each ultrasonic detection unit (20) has the second cable interface (27), the storage

battery (28) and the recharge circuit (29) respectively connected to a communication cable, a brake light and night light of the truck trailer through the special connector (201).